

look-up table that is indexed based on consumer information, evaluating that token can require using supplied consumer information received in 330 to retrieve information from an insurance rate look-up table previously stored in the cache during step 320. Thus, 360 indicates that the determination is made whether product rate information is needed from the cache. As previously noted, that product rate information can take a variety of forms, and may even be a sub-expression that requires parsing and evaluation itself. If product rate information is needed, the information is retrieved in 340 and the evaluation process proceeds forward. When no additional product rate information is needed to evaluate the current token or tokens, operation proceeds to 370 to determine if additional tokens remain in the product rate expression to be parsed and/or evaluated. If so, the process returns to 350, and if not, evaluation of the product rate expression is complete. A product rate is returned to the rating engine client (380), and operation of the rating engine server returns to 330 to await the next request.

In the Claims

Please cancel claims 13 and 25 without prejudice to the subject matter disclosed therein.

Please substitute the following claims for the pending claims with the same number:

1. (Amended) A product rate calculation system comprising:
  - a processor;
  - computer readable medium, wherein the computer readable medium is at least one of an electronic storage medium, a magnetic storage medium, an optical storage medium, and a communications medium conveying signals encoding instructions;
  - a database interface operable to request and receive product rate information from a database, the product rate information including at least one product rate expression;
  - a product rate information cache storing product rate information;

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Cont'd

an expression evaluation routine operable to parse a product rate expression stored in the product rate information cache into at least one token, and operable to evaluate the at least one token to determine a product rate; and a client interface operable to provide the product rate to a client application running on a computer system, wherein at least one of the database interface, the product rate information cache, the expression evaluation routine and the client interface is encoded in the computer readable medium as instructions executable on the processor.

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15. (Amended) A method of calculating a product rate comprising:  
loading product rate information including at least one product rate expression from a database;  
storing the product rate information in a cache;  
receiving a request for a product rate from a client application running on a computer system;  
parsing the at least one product rate expression stored in the cache into at least one token;  
evaluating the at least one token to determine the product rate; and  
transmitting the product rate to the client application running on the computer system.

Please add the following new claims:

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27. (New) A computer readable medium comprising program instructions executable on a processor for calculating a product rate, the computer readable medium being one of an electronic storage medium, a magnetic storage medium, an optical storage medium, and a communications medium conveying signals encoding the instructions, wherein the program instructions are operable to implement each of:  
loading product rate information including at least one product rate expression from a database;  
storing the product rate information in a cache;  
receiving a request for a product rate from a client application running on a

computer system;  
parsing the at least one product rate expression stored in the cache into at least one token;  
evaluating the at least one token to determine the product rate; and  
transmitting the product rate to the client application running on the computer system.

28. (New) The computer readable medium of claim 27 wherein the product rate information includes at least one of a multi-dimensional table of data and a numeric value.

29. (New) The computer readable medium of claim 27 wherein the product rate information is stored as a plurality of records in the database.

30. (New) The computer readable medium of claim 27 wherein the receiving a request further comprises receiving consumer information from the client application running on the computer system, the consumer information being used to evaluate the at least one token to determine the product rate.

31. (New) The computer readable medium of claim 27 wherein the product rate information is insurance product rate information.

32. (New) The computer readable medium of claim 27 wherein the loading and storing are performed once, and wherein the receiving, parsing, evaluating, and transmitting are performed a plurality of times.

33. (New) The computer readable medium of claim 27 wherein the at least one token is a plurality of tokens, at least one of the plurality of tokens being an operand, and at least one other of the plurality of tokens being an operator.

34. (New) The computer readable medium of claim 33 wherein the operand is one of a constant numeric value, a variable, a logic value, a function, and a string; and

wherein the operator is one of a numeric operator and a logic operator.

35. (New) The computer readable medium of claim 33 wherein the operand and the operator are arranged in the product rate expression following one of post-fix, pre-fix, and in-fix notation.

36. (New) The computer readable medium of claim 27 wherein the evaluating the at least one token to determine the product rate further comprises at least one of:

- performing a mathematical operation;
- performing a logical operation; and
- retrieving data from a multi-dimensional table of data stored in the cache.

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